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**Date:** August 07, 2015

**To:** Brandon McDonald  
ESAT Region 3 Project Officer

**From:** **Ex. 4 - CBI**  
Data Reviewer

**Ex. 4 - CBI**  
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**Subject:** Organic Data Validation (S4VM)  
Site: Miller Chemical  
Case: R34651 SDG: C0DE0

### **Overview**

Case R34651, Sample Delivery Group (SDG) C0DE0, consisted of one (1) trip blank and six (6) drinking water samples including one (1) field duplicate pair analyzed for volatile compounds. Analyses were performed by TestAmerica Savannah utilizing Gas Chromatography/Mass Spectrometry (GC/MS) according to EPA Method 524.2.

### **Summary**

Data were validated with guidance from organic National Functional Guidelines, and is assigned the Superfund Data Validation Label S4VM (Stage\_4\_Validation\_Manual).

Samples were submitted to the laboratory directly by the contractor and not through the EPA Technical Services Branch (TSB). Environmental Services Assistance Team (ESAT) has been tasked to evaluate laboratory reported data for the purpose of usability.

No drinking water sample in this SDG reported a result which exceeded the National Primary Drinking Water Regulations (NPDWRs) Maximum Contaminant Level (MCL), nor did they exceed the Numeric Removal Action Levels for Drinking Water promulgated by the Office of Solid Waste and Emergency Response (OSWER).

## **Notes**

Compounds detected below Reporting Limits (RLs) are estimated and have been qualified "J".

Percent recoveries for surrogates and internal standard area counts were within control limits for all analyses associated with the samples in this SDG. No data were qualified based on these findings.

Percent recoveries and Relative Percent Differences (RPDs) in Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD) analyses were within control limits. No data were qualified based on LCS/LCSD precision.

The positive result reported for acetone in trip blank C0DE6 did not qualify drinking water samples.

Accuracy and precision criteria were met by the laboratory in the initial and continuing calibration verification standard analyses associated with the samples in this SDG. No data were qualified based on these findings.

Results reported for field duplicate pair C0DE3/C0DE7 were within twenty (20) RPD,  $\pm$  RL for all analytes. No data were qualified based on field duplicate precision.

The laboratory reported roughly half of the target compounds in units of micrograms per liter (ug/L), and the remaining target compounds in units of milligrams per liter (mg/L). The analytical method reports all units in of ug/L. It is unknown why the laboratory chose to report results in this fashion. No action was taken by the reviewer based on this finding.

The laboratory reported non-detected results at the Method Detection Limit (MDL) and not at the RL, as is customary. No action was taken by the reviewer based on this finding.

**Glossary of Data Qualifier Codes**

U	The analyte was analyzed for, but was not detected at a level greater than or equal to the level of the adjusted Contract Required Quantitation Limit (CRQL) for sample and method.
J	The analyte was positively identified and the associated numerical value is the approximate concentration of the analyte in the sample (due either to the quality of the data generated because certain quality control criteria were not met, or the concentration of the analyte was below the CRQL).
J+	The result is an estimated quantity, but the result may be biased high.
J-	The result is an estimated quantity, but the result may be biased low.
B	The result is presumed a blank contaminant. This qualifier is used only for drinking water samples.
NJ	The analysis indicates the presence of an analyte that has been “tentatively indentified” and the associated numerical value represents its approximate concentration.
UJ	The analyte was not detected at a level greater than or equal to the adjusted CRQL. However, the reported adjusted CRQL is approximate and may be inaccurate or imprecise.
R	The sample results are unusable due to the quality of the data generated because certain criteria were not met. The analyte may or may not be present in the sample.
C	This qualifier applies to pesticide and Aroclor results when the identification has been confirmed by Gas Chromatograph/Mass Spectrometer (GC/MS).
X	This qualifier applies to pesticide and Aroclor results when GC/MS analysis was attempted but was unsuccessful.

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